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SERVICE BULLETIN

AIR83064 - 32 - 13

MAIN LANDING GEAR SHOCK STRUT- REPLACE TORQUE ARM CENTRE PIN

1. PLANNING INFORMATION

A. Effectivity

(1)	Aircraft	SAAB 340B
(2)	Unit	MLG Shock Strut
(3)	Part Numbers	AIR83064/7 (9303319-007)

B. Reason

During a review of documentation impacting a batch of Centre Pins Part Number AIR134762 manufactured by Heroux Devtek Wichita, there was no evidence that the post machining stress relief or de-embrittlement post cadmium plating had been performed.

C. Description

This bulletin requires the removal of the non-conforming Centre Pin and introduces a replacement conforming Centre Pin installed on thirty four Main Landing Gear of known part and serial numbers as shown in the table below:-

Part Number	Serial Number
AIR83064/7	LK8900745
AIR83064/7	LK8900746
AIR83064/7	LK8900748
AIR83064/7	LK8902587
AIR83064/7	LK9007408
AIR83064/7	LK9007854
AIR83064/7	LK9008021
AIR83064/7	LK9101658
AIR83064/7	LK9102437

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C. Description (Continued)

Part Number	Serial Number
AIR83064/7	LK9103428
AIR83064/7	LK9104596
AIR83064/7	LK9200959
AIR83064/7	LK9204809
AIR83064/7	LK9204811
AIR83064/7	LK9204814
AIR83064/7	LK9501133
AIR83064/7	LK9602079
AIR83064/7	LK9700044
AIR83064/7	LK9700094
AIR83064/7	LK9700556
AIR83064/7	LK9701034
AIR83064/7	LK9701705
AIR83064/7	LK9900213

D. Compliance

This service bulletin is mandatory and the Centre Pin must be replaced within 6 months from the date of this bulletin. Pre and post flight visual checks of the affected Main Landing Gear Centre Pin condition is recommended.

E. Approval

The contents of this bulletin have been approved and validated by HEROUX DEVTEK.

F. Manpower

To incorporate this service bulletin with new parts allow approximately 6 hours per unit. The unit will also require testing, allow approximately 2 hours per unit.

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G. Material, cost and availability

Material required for the repair of each unit.

Part No.	Keyword	Qty
AIR134762	Centre Pin	1
AIR123722	Shim	1
MS24665-134	Split Cotter Pin	2
MS24665-287	Split Cotter Pin	2
Corrosion Prevention Compound MIL-C-16173		As required
AMS-S-8802 Sealing Compound		As required

H. Special Tools

AE7045 Setting Fixture
or
Surface table and parallel blocks.

I. Weight Change

Not applicable.

J. References

Component Maintenance Manual 32-10-06.

2. ACCOMPLISHMENT INSTRUCTIONS (Figure 1)

The procedure can be completed On or Off aircraft. Refer to the CMM for reference to standard procedures. If the procedure is to be completed On aircraft, the aircraft must be on jacks. The MLG must be compressed to gain access to the retaining bolts of the torque link pins. Refer to the AMM. The following procedure is for On aircraft centre pin replacement.

A. PROCEDURE FOR REMOVAL OF CENTRE PIN (Refer to CMM 32-10-06).

(1) Open the inflation valve and release all Nitrogen gas pressure from the MLG.

(2) Remove the two nuts (1-56), two washers (1-52) and the two bolts (1-60) that retain the guide (1-152).

(3) Remove the nut (1-132), two washers (1-136), bolt (1-144) and the spacer (1-140) that attaches the bracket to the upper torque link.

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NOTE : For reference, during disassembly note the amount of washers that have been used to align for the split cotter pin holes.

(4) Remove the split pins (1-284) (1-352), nuts (1-288) (1-356), washers (1-292) (1-360) and the bolts (1-296) (1-364) that retain the torque link pins in position. Remove the two torque link pins (1-280, 1-348) and the spacer (1-304). Discard the split pins.

(5) Leave the guide (1-152), guide cap (1-64) and the bracket (1-128) in position on the hoses and harnesses.

(6) Carefully remove the torque links assembly from the cylinder lug and the axle adapter, take care not to damage the microswitch plungers.

(7) Remove the split cotter pins (1-368) that retain the two nuts on the centre pin. Remove the nut (1-372) from the fixed side of the torque link assembly. Remove the washer(s) (1-376), washer (1-384) and bracket (1-386), remove the torque link from the centre pin. Remove the shim (1-392). Discard the split cotter pins.

(8) Remove the nut (1-372), washer (1-376), bracket (1-386) and washer (1-380A). Remove and discard the centre pin (1-388A).

B. PROCEDURE FOR ASSEMBLY OF NEW CENTRE PIN (Refer to CMM 32-10-06).

Notes (1) Apply corrosion prevention compound MIL-C-16173 (Tectyl 502C) to all threads, unless otherwise stated.

(2) Apply sealing compound AMS-S-8802 under all bolt heads, washers and mating parts.

(3) Equivalent materials may be substituted for sealant AMS-S-8802 and corrosion protection compound Tectyl 502C.

(1) Clean and complete a visual check of the parts prior to assembly.

(2) Install the new centre pin (1-388A) to the upper torque link, the pin is to locate on the machined shoulder. Install the washer (1-384), washers (1-376) and the nut (1-372), tighten the nut a minimum amount so there is no movement of the pin.

NOTE : If the setting fixture AE7045 is not available, the MLG will have to be removed from aircraft. The MLG can be placed on a surface table and parallel blocks can be put under the trunnion pins and the axle adapter so that the axis at each end is in the same plane. Install the torque links, torque link pins and new centre pin to the lugs of the cylinder and axle adapter. The torque links will require a small load applying so there are no gaps at position A, continue from paragraph (4).

(3) Install the lower torque link to the centre pin and install this assembly to the setting fixture AE7045. Refer to Figure 1. Use the adjusting screws of the setting fixture and push the torque link assembly in the direction of the arrows, check there are no gaps at the position A.

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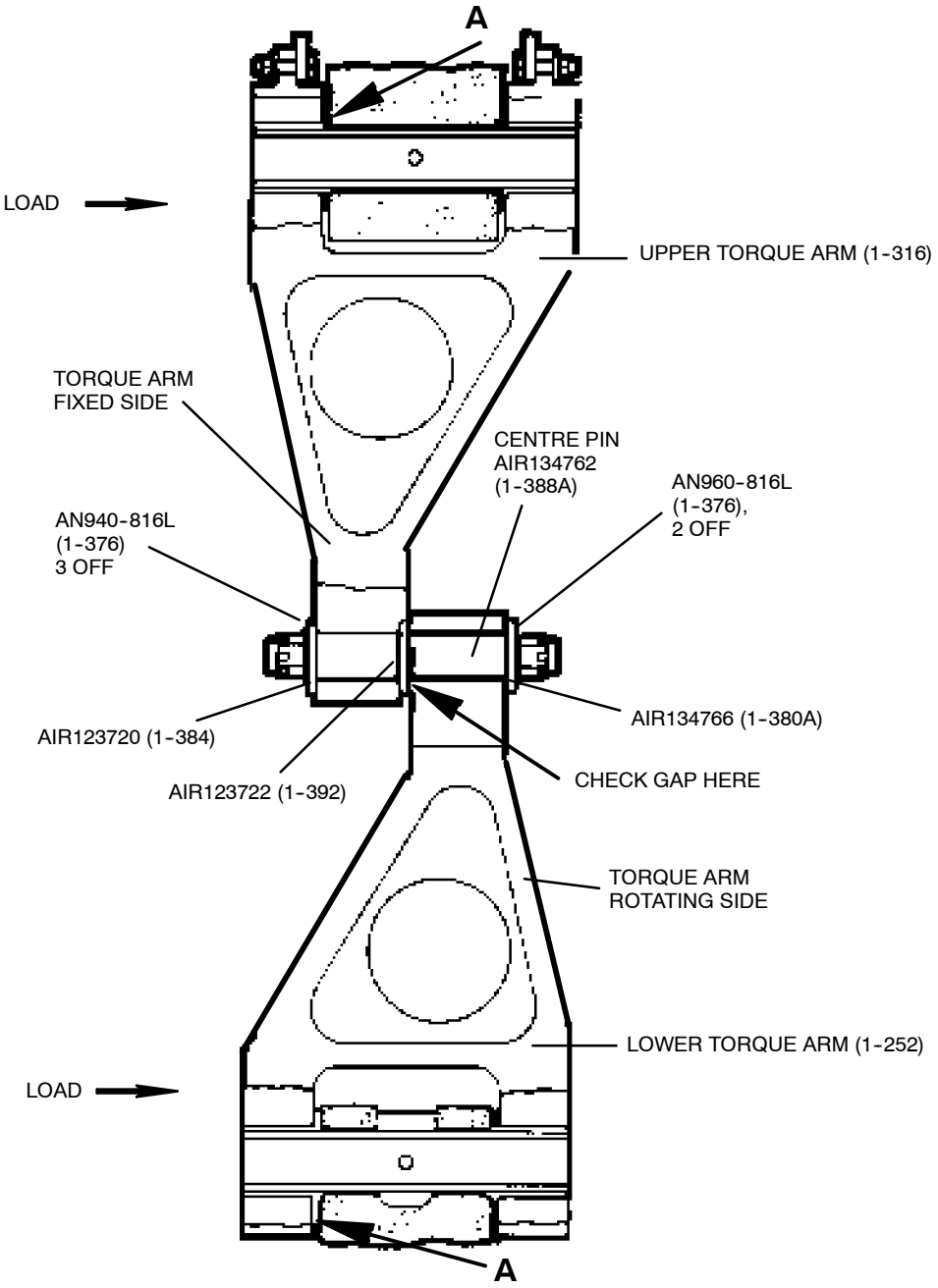

Figure 1
Assembly of Torque Arms

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(4) Measure the gap between the face of the centre pin and the flange face of the bush in the lower torque link. Adjust the shim (1-392) to between the size of the gap and the gap +0,05 mm (0.002 inch).

(5) Remove the torque link assembly from the setting fixture, remove the lower torque link, the nut, washers and the pin.

(6) Apply sealant AMS-S-8802 to the shim (1-392) and install the shim to the centre pin. Install the pin to the upper torque link to retain the shim adjacent to the shoulder. Install the washer (1-384), bracket (1-386), washer (1-376) and the nut (1-372). Tighten the nut to a minimum to remove any freeplay.

(7) Install the lower torque link to the centre pin. Install the washer (1-380A), bracket (1-386), washer (1-376) and nut (1-372). Tighten the nut to a minimum to remove any free play.

(8) Install the torque links assembly to the cylinder lug and the axle adapter, position the guide (1-152A) and details between the two brackets (1-386), take care not to damage the microswitch plungers.

(9) Install the spacer (1-304) between the lugs of the axle adapter. Install the two torque link pins (1-280, 1-348).

(10) With the guide, cap and bracket positioned between the two brackets (1-386), install the two bolts (1-60), washers (1-52) and nuts (1-56). Tighten the nuts to between 0,8 and 1,1 Nm (7 and 10 lb in).

(11) Install the spacer (1-140) and the bolt (1-144) to the bracket (1-128) and torque link. Install two washers (1-136) and nut (1-132), tighten the nut to between 1,4 and 1,7 Nm (12 and 15 lb in).

(12) Install the upper bolt (1-364) to retain the upper torque link pin. Install the washers (1-360) and nut (1-356). Tighten the nut to between 3,5 and 4,6 Nm (30 and 40 lb in) and install a new split cotter pin (1-352).

(13) Install the lower bolt (1-296) to retain the lower torque link pin, make sure the bolt goes through the spacer (1-304) and the bracket (1-300). Install the washers (1-292) and the nut (1-288). Tighten the nut to between 3,5 and 4,6 Nm (30 and 40 lb in) and install a new split cotter pin (1-284).

(14) Tighten the two nuts (1-372) installed to the centre pin to between 32,8 and 46,3 Nm (290 and 410 lb in). Install two new cotter pins (1-368).

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(15) Apply a bead of sealant AMS-S-8802 around the joints of all nuts and bolts heads.

(16) Apply a layer of Corrosion protection compound Tectyl 502C to all exposed threads after assembly.

C. TEST (Refer to CMM 32-10-06)

(1) Inflate the MLG with Nitrogen gas in accordance with the AMM.

(2) If the bulletin was done ON aircraft, refer to the AMM. Do aircraft functionals to check the WOW microswitches are operating correctly and light box indications are correct.

(3) If the procedure was done OFF aircraft, compress the MLG and use Nitrogen gas pressure to extend the MLG to check the WOW microswitches are operating correctly and light box indications are correct.

D. Method of identification

(1) Record the incorporation of this service bulletin in the appropriate aircraft equipment documents.

(2) Record that this service bulletin has been incorporated by marking on the 'Shock Absorber' adjacent to the nameplate 'SB AIR83064-32-13 EMBODIED'. Prior to applying the marking degrease the affected area of the cylinder with a suitable cleaning solvent. Use a pen with black indelible ink (Staedtler Lumocolor 313 pen). The text should be as clear as possible. Protect the marking using a spirit based clear varnish or clear MYLAR tape.

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3. MATERIAL INFORMATION

New Part No.	Qty	Keyword	Old Part No.	Instructions Dispositions (See Note No.)
AIR134762	1	Centre Pin	AIR134762	2
AIR123722	1	Shim	AIR123722	4
MS24665-134	2	Split Cotter Pin	MS24665-134	4
MS24665-287	2	Split Cotter Pin	MS24665-287	4

NOTES
1. New part interchangeable with old part.
2. Return parts to HEROUX DEVTEK.
3. Discard old part on disassembly.
4. Consumable item replaced on assembly.
5. Old part can be converted to new part.
6. New part.

4. ISSUING AUTHORITY

The technical content of this document is approved under the authority of DOA number UK.21J.0131.

Signed .....

HEROUX DEVTEK

Date 7/9/21